

100

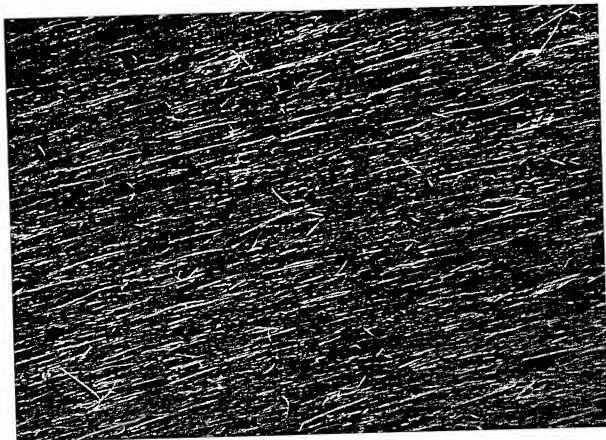


FIG. 1

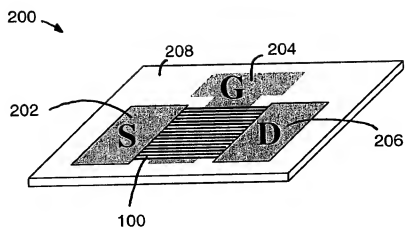


FIG. 2

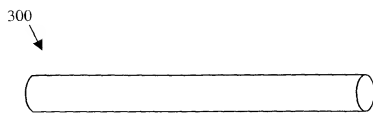


FIG. 3A



FIG. 3B



FIG. 3C

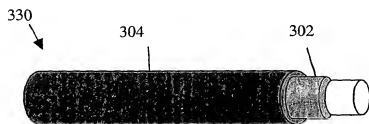


FIG. 3D

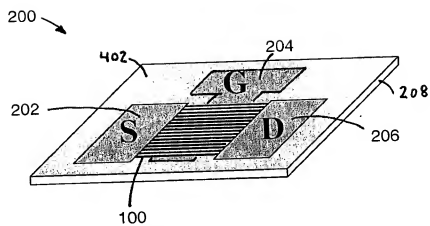


FIG. 4A

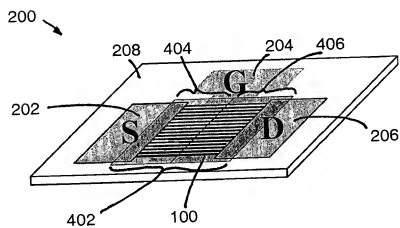


FIG. 4B

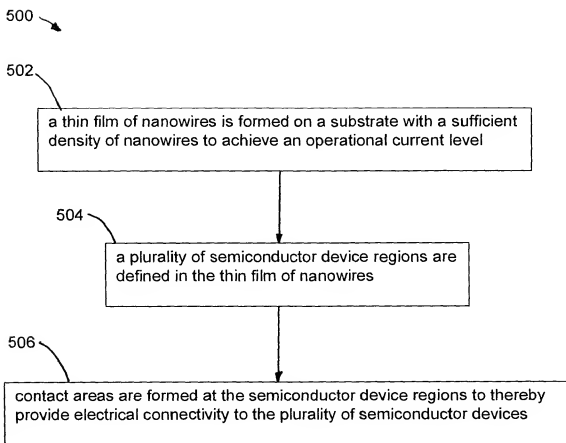


FIG. 5

600 →

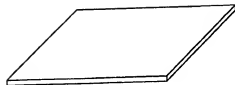


FIG. 6A

600 →

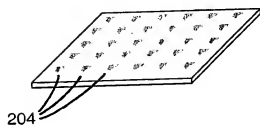


FIG. 6B

600 →

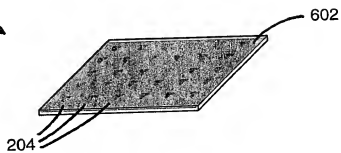


FIG. 6C

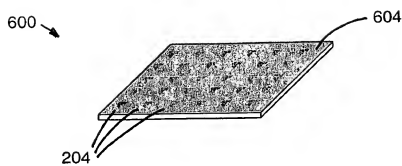


FIG. 6D

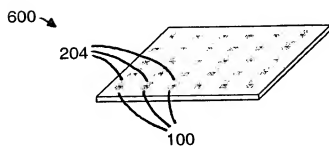


FIG. 6E

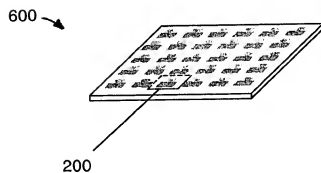


FIG. 6F

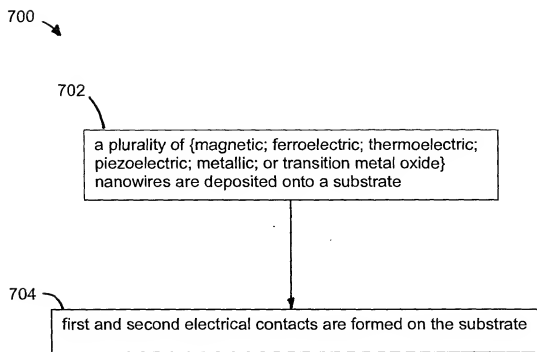


FIG. 7

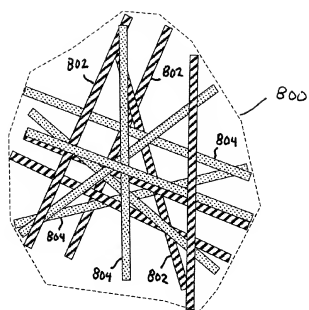


FIG. 8A

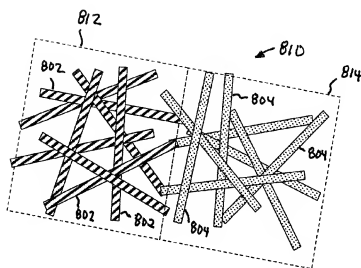


FIG. 8B

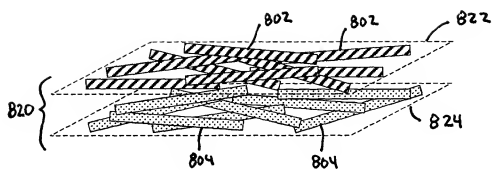


FIG. 8C

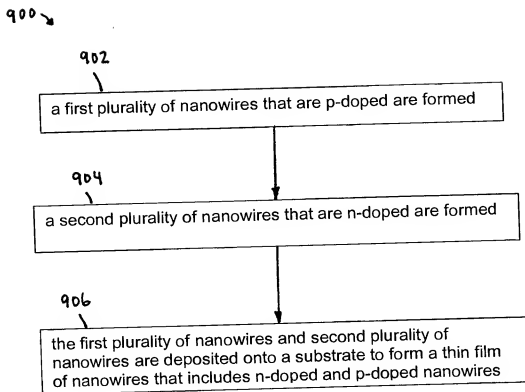


FIG. 9

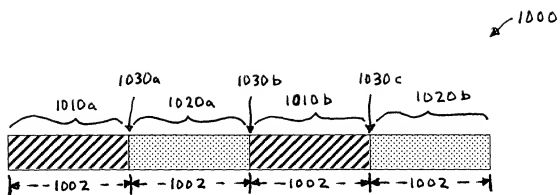


FIG. 10

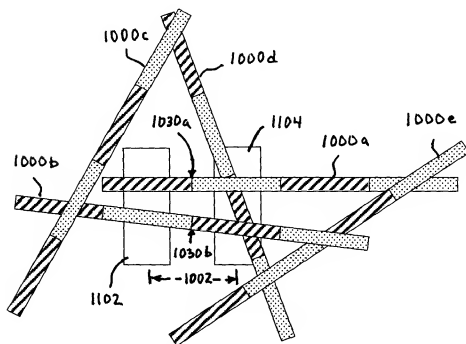


FIG. 11A

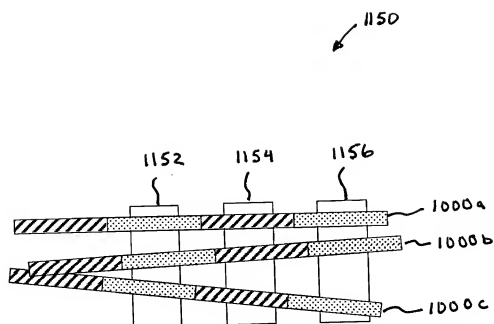


FIG. 11B

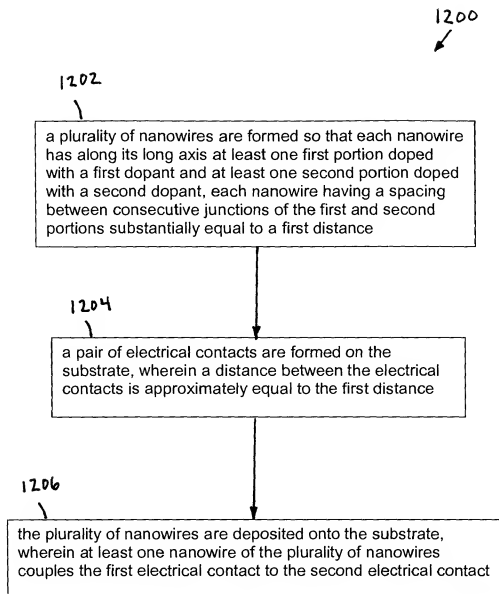


FIG. 12

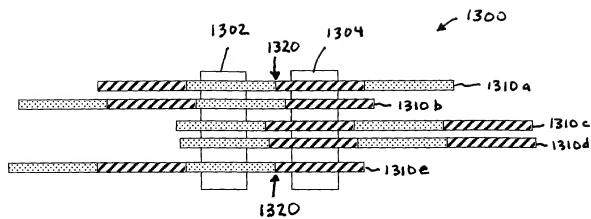


FIG. 13A

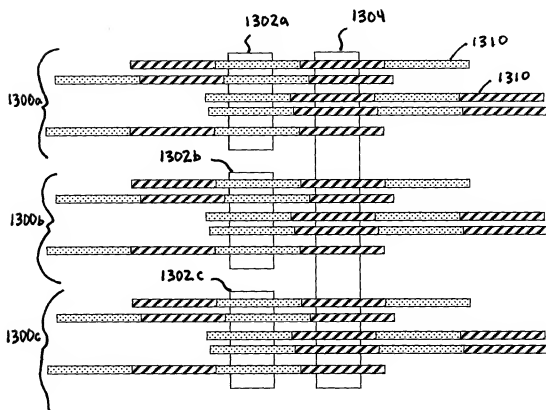


FIG. 13B

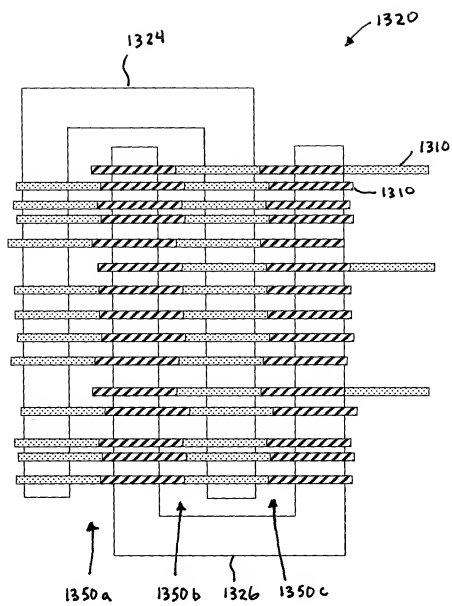


FIG. 13C

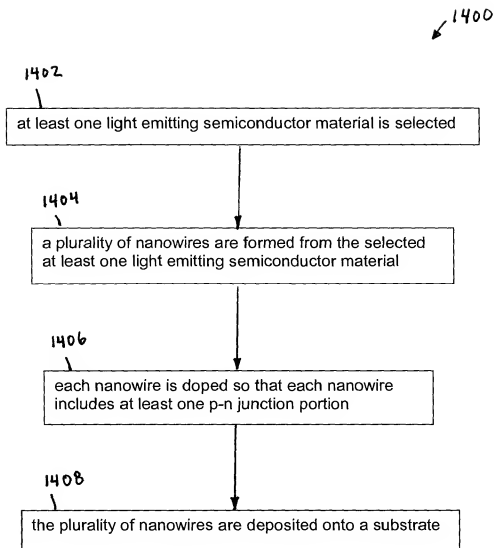


FIG. 14

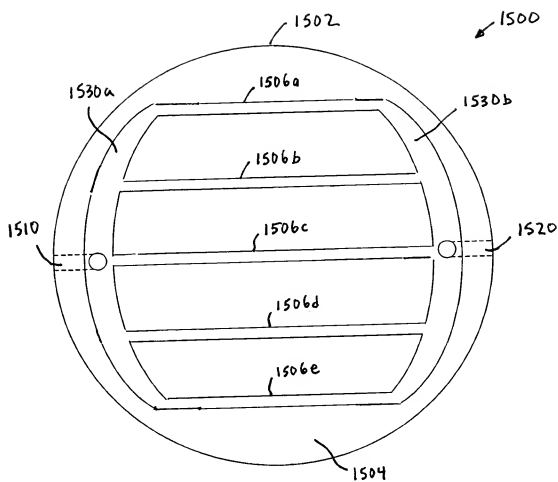


FIG. 15A

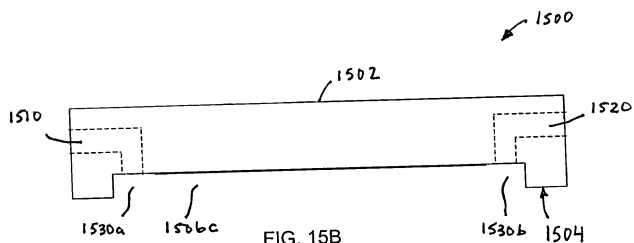


FIG. 15B

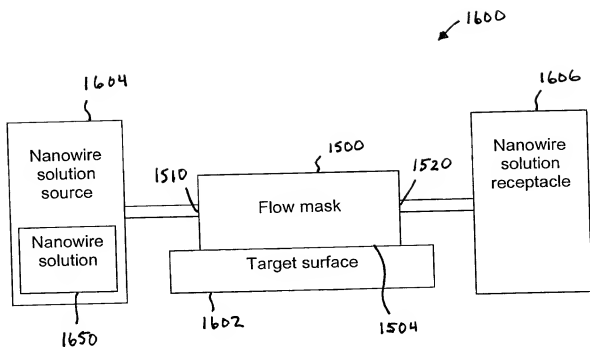


FIG. 16

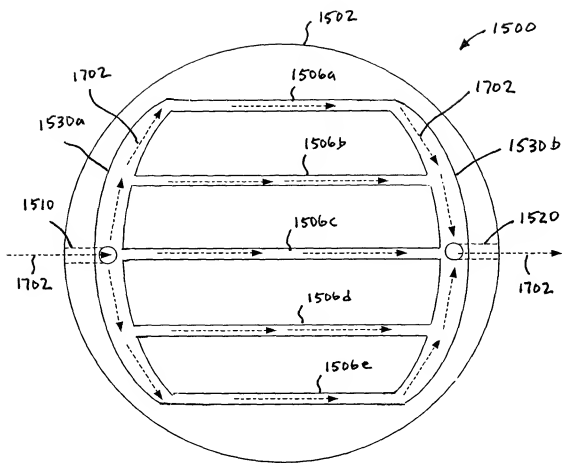


FIG. 17A

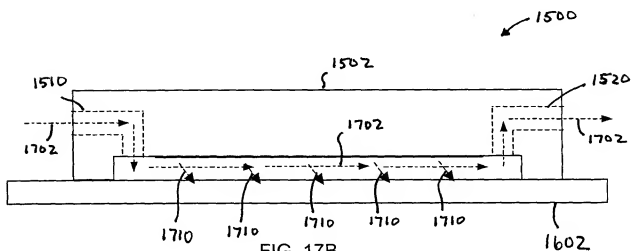


FIG. 17B

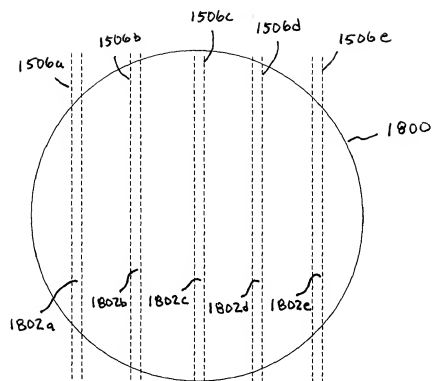


FIG. 18A

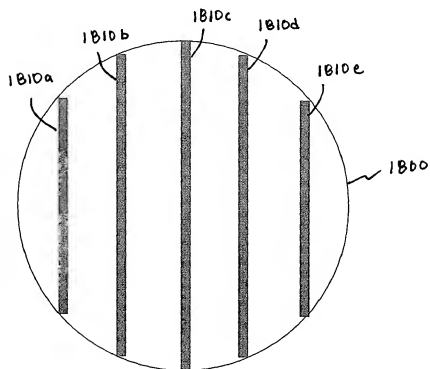


FIG. 18B

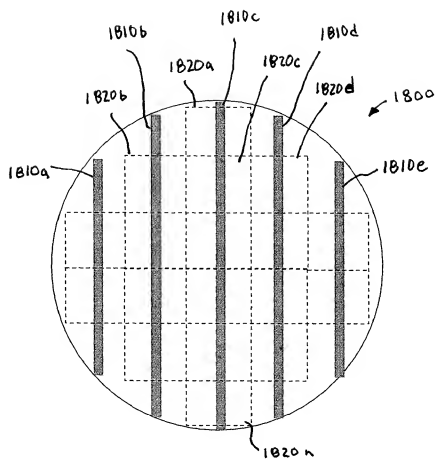
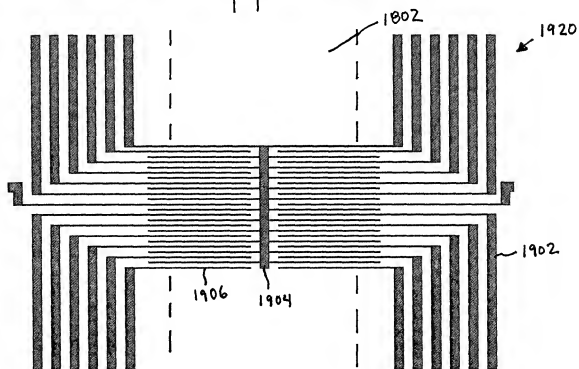
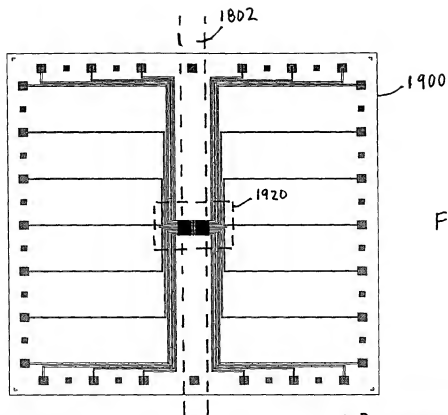


FIG. 18C



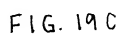
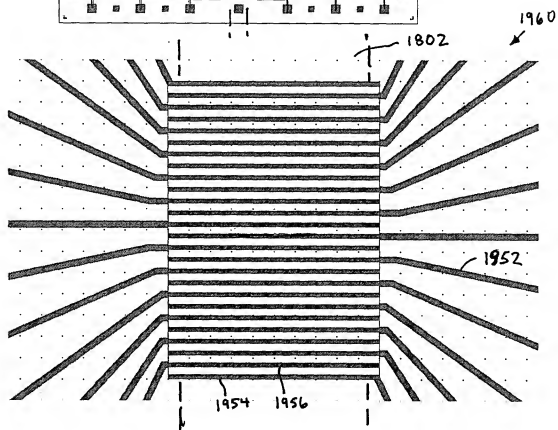
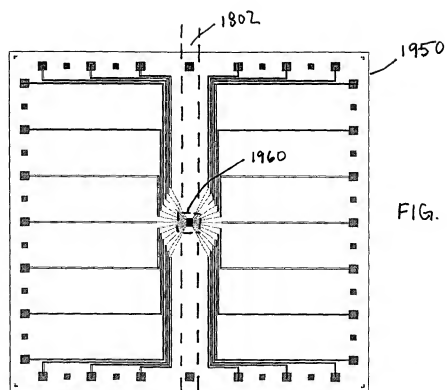


FIG. 19C



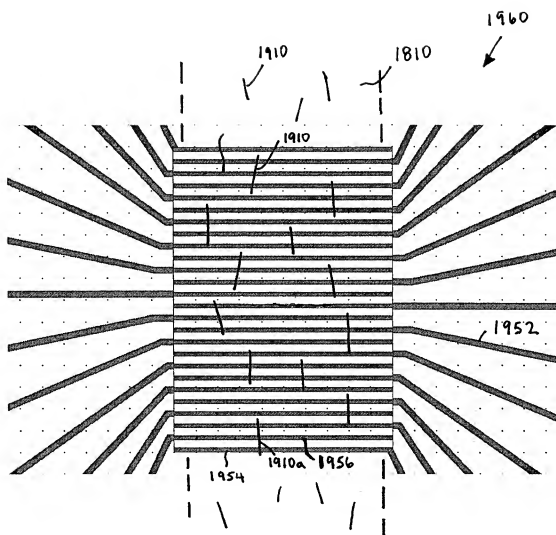


FIG. 19F

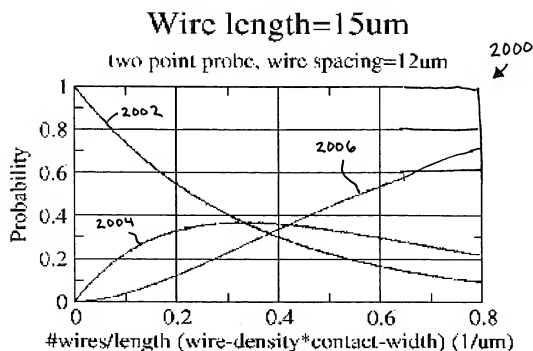


FIG. 20A

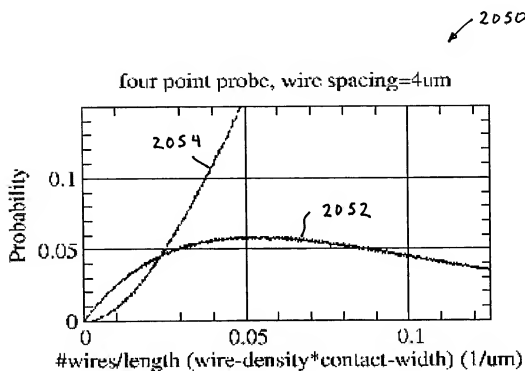


FIG. 20B

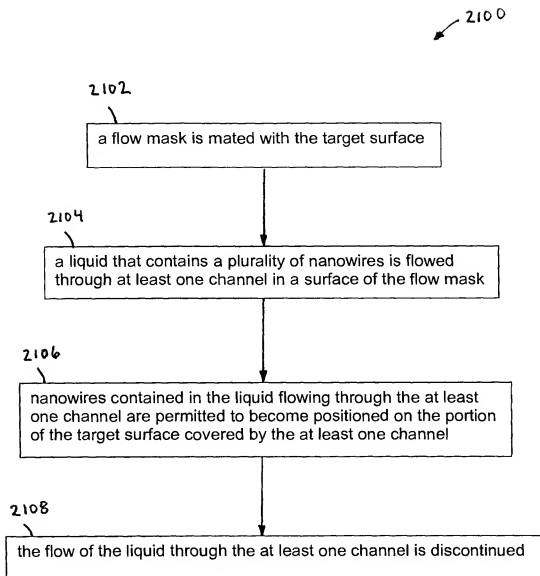


FIG. 21

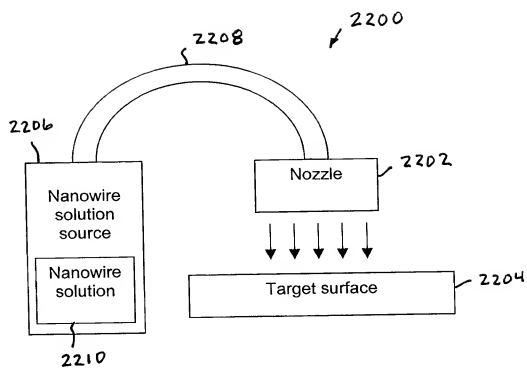


FIG. 22

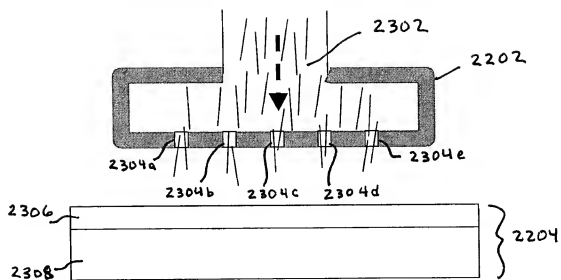


FIG. 23

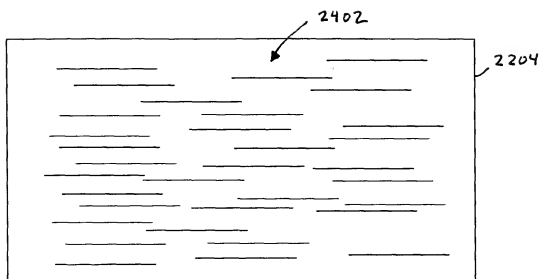


FIG. 24

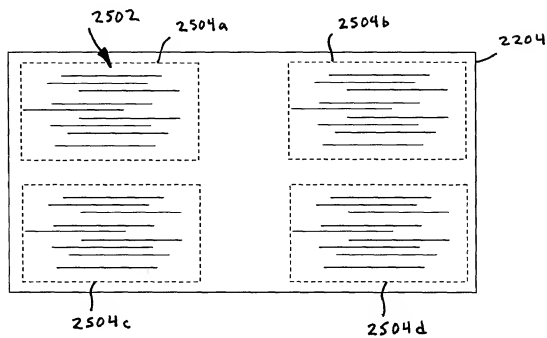


FIG. 25

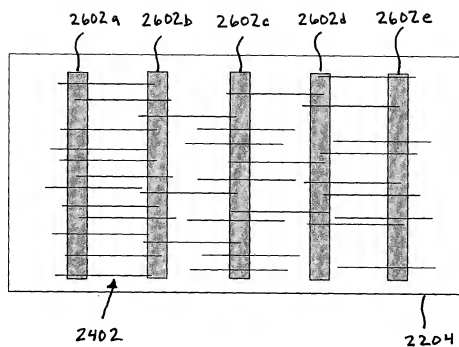


FIG. 26

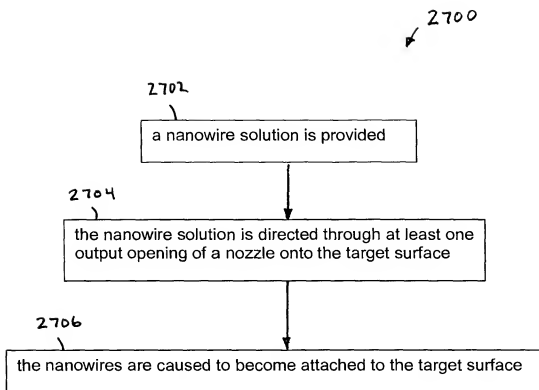


FIG. 27

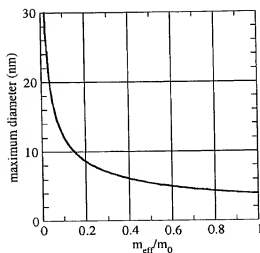


FIG. 28

Handwritten notes above the table: 2902, 2904, 2906, and 2900 with an arrow pointing to the table.

Semiconductor	Effective mass m_{eff}/m_0	Band gap E_g (eV)
Diamond	0.57	5.5
Si	0.33	1.14
Ge	0.2	0.67
AlN	0.4	6.2
AlSb	0.12	1.58
GaN	0.13	3.2
GaP	0.38	2.9
GaAs	0.067	1.5
GaSb	0.041	0.72
InN	0.11	2.0
InP	0.07	1.29
InAs	0.02	0.33
InSb	0.013	0.16
ZnO	0.27	3.35
Zns	0.40	3.68

FIG. 29

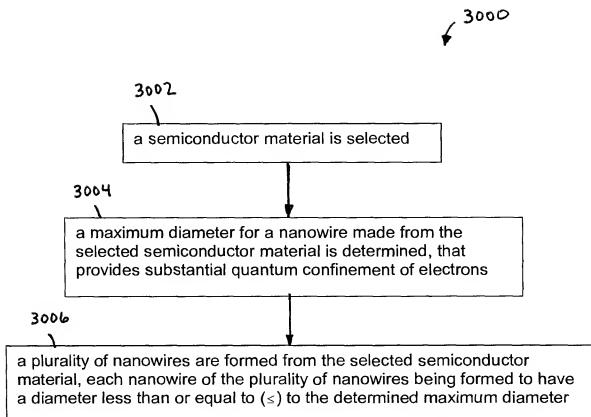


FIG. 30

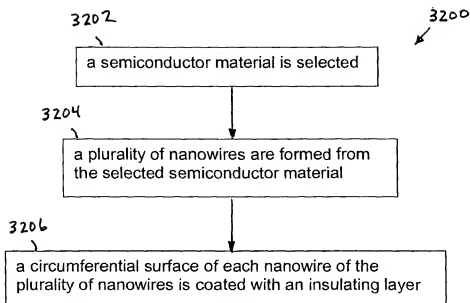


FIG. 32

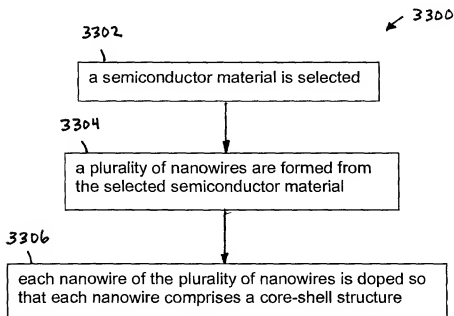
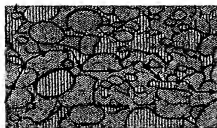


FIG. 33

Source



Drain

FIG. 34A

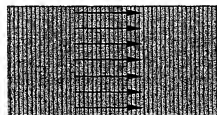
Source



Drain

FIG. 34 B

Source



Drain

FIG. 34C

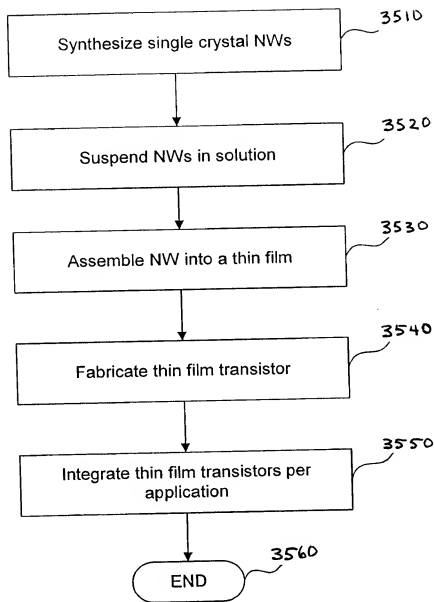


FIG. 35A

FIG. 35B

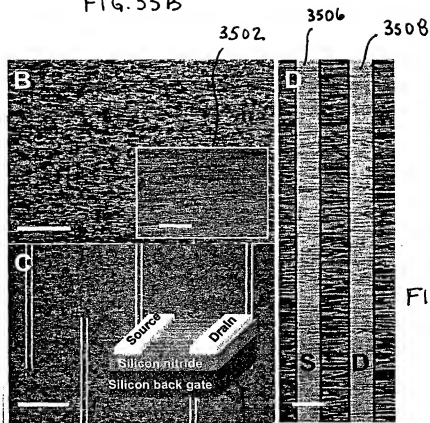


FIG. 35D

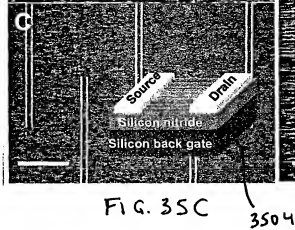


FIG. 35C

FIG. 36 A

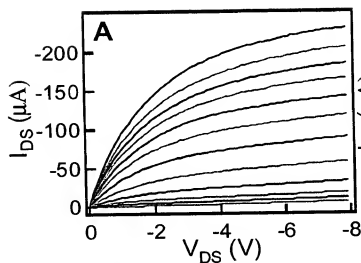


FIG. 36 B

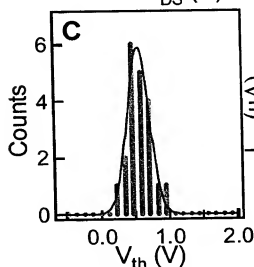
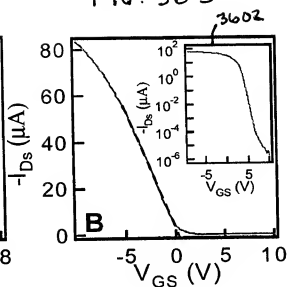


FIG. 36 C

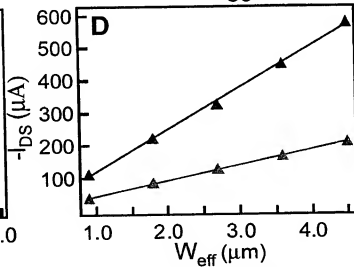


FIG. 36 D

FIG. 37A

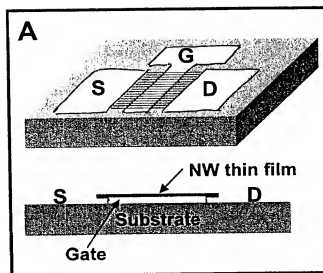


FIG. 37B

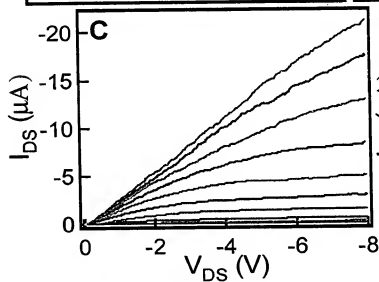
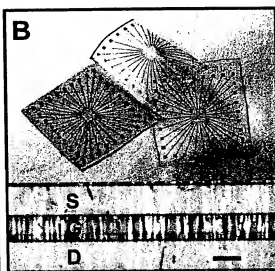


FIG. 37C

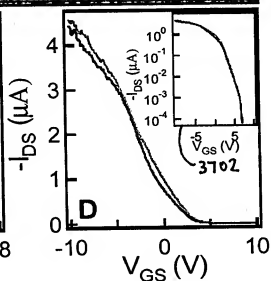


FIG. 37D

A**G (NaCl solution)**

FIG. 38A

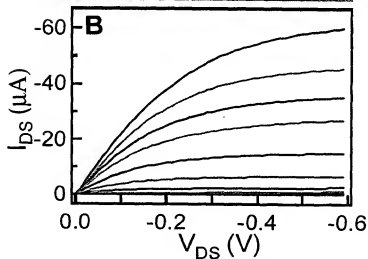


FIG. 38B

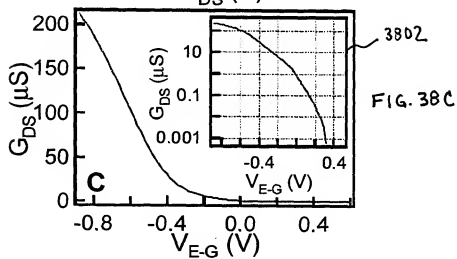


FIG. 38C

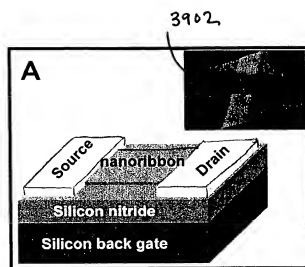


FIG. 39A

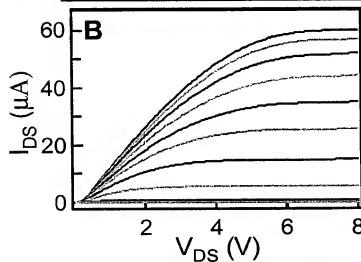


FIG. 39B

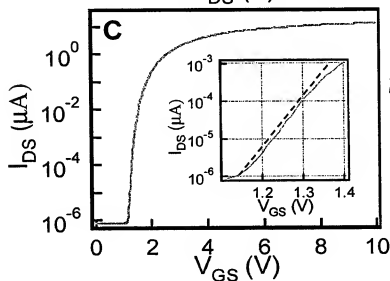


FIG. 39C

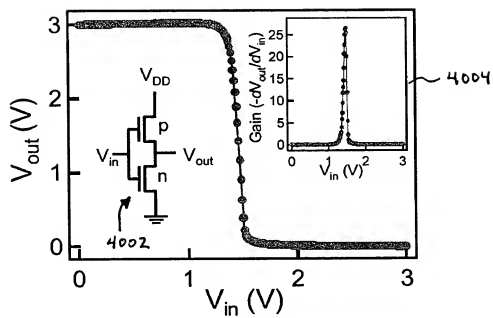


FIG. 40

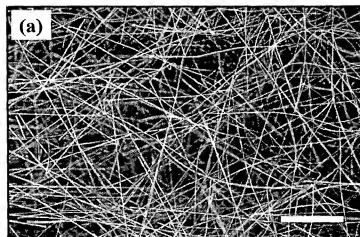


FIG. 41A

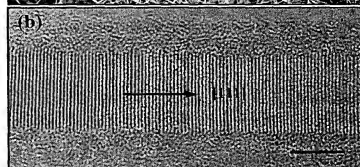


FIG. 41B

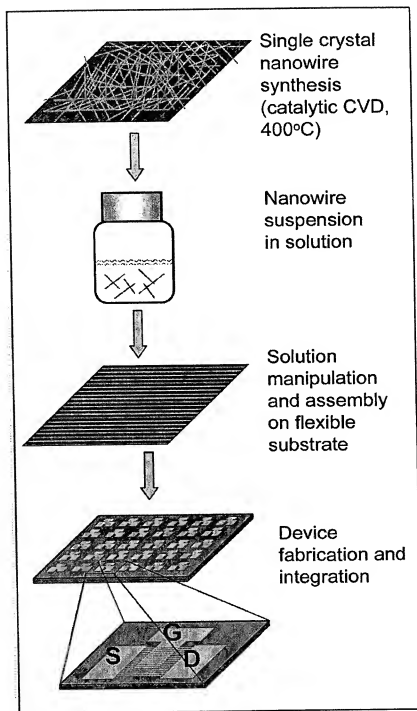


FIG. 42

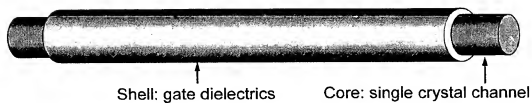


FIG. 43

A: a-Si Technology



FIG. 44A

B: poly-Si Technology



FIG. 44B

C: Si Nanowire Technology



FIG. 44C

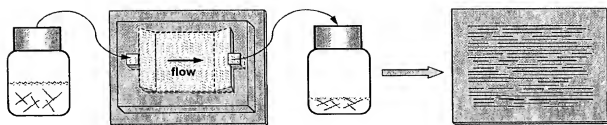


FIG. 45

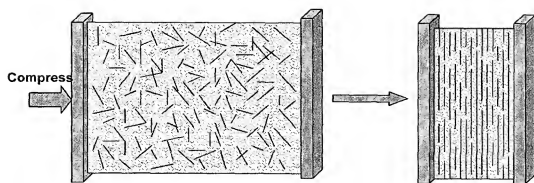


FIG. 46

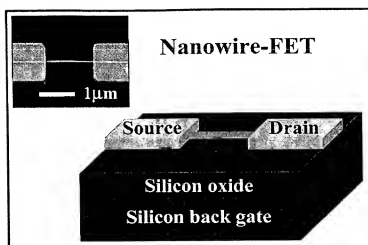


FIG 47

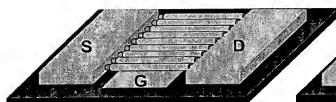


FIG. 48A



FIG. 48B